## ABSTRACT OF THE DISCLOSURE

This invention makes public a kind of DNA chip for diagnosing the mutation of the hereditary anemia related genes with the character of fixed specific NA probes for testing the mutation of hereditary anemia related gent on the glass slide, silica plate, membrane and macromolecular materials. In comparison with current techniques, in this invention a 70×4 DNA probe is fixed on the surface of a carrier the size of a microscope slide, and this probe can detect hereditary anemia such as α-, or β-thalassemia, and hemoglobin abnormality caused by related gent mutation. The invention has the statistic characteristics of parallel analysis and multiple analysis. Under the specific elution conditions, the completely matched and single-base-non-matched hybridization can be distinguished. Consequently, this DNA chip is appropriate for early diagnosis and prenatal screening of hereditary anemia.